No. 275 / November 1, 2017

**Domain: Energy** 

## **Energy resources and consumption in 2016**

Primary energy production decreased by 6.0% in 2016 compared to 2015, while imports of energy products increased by 15.7%; gross inland consumption of energy decreased by 0.6% compared to previous year; final energy consumption increased as against 2015, by 1.9%

The **energy resources** available in 2016 were the same with those of 2015, namely 42.2 million tonnes oil equivalent<sup>1</sup> (toe), the increase in the imports of energy products balancing out the decrease in primary energy production.

In 2016, the **primary energy resources** amounted to 40910 thousand tonnes oil equivalents, increasing with 141 thousand toe (+0.3%) as against previous year.

Table 1: Energy resources, by structure and main items, in 2016, compared to 2015

	2015	2016	<b>2016</b> as ag	gainst 2015
			thousand	
	thousand	thousand	toe	
	toe	toe	(±)	%
ENERGY RESOURCES - TOTAL	42179	42179	0	100.0
- Primary energy production				
(including recovered energy)	26387	24798	-1589	94.0
- Imports	11333	13113	+1780	115.7
- Stock at the beginning of the year	4459	4268	-191	95.7
Out of primary energy resources:				
- coal (excluding coke)	5725	5074	-651	88.6
- crude oil <sup>2)</sup>	11513	12259	+746	106.5
- usable natural gas <sup>3)</sup>	10536	10579	+43	100.4
- imported coke	503	509	+6	101.2
- imported energy products	2996	2890	-106	96.5
- hydroelectric, wind, photovoltaic and				
nuclear-electric energy	5096	5086	-10	99.8

Table data in xls. format.

 $<sup>^{\</sup>rm 1}$  conventional fuel with a calorific power of 10000 Kcal/Kg.

<sup>&</sup>lt;sup>2</sup> including gasoline and ethane from extraction scaffolds

<sup>&</sup>lt;sup>3</sup> excluding gasoline and ethane from extraction scaffolds

**Primary energy production** was 24798 thousand toe in 2016, decreasing with 1589 thousand toe as against 2015, but preserving its significant weight in total energy resources, accounting for 58.8% of them.

The most significant decrease compared to previous year (-11.4%) was that for natural gas. Primary production of electricity increased by 3.4% compared to previous year (+77 thousand toe).

Table 2: Production of the main primary energy carriers in 2016, as compared to 2015

	2015	2016	2016 as against 2015		
	thousand toe	thousand toe	thousand toe (±)	%	
- coal (excluding coke)	4711	4233	-478	89.9	
- crude oil <sup>1)</sup>	3906	3714	-192	95.1	
- usable natural gas <sup>2)</sup>	8874	7862	-1012	88.6	
- hydroelectric, wind and photovoltaic energy	2242	2319	+77	103.4	

<sup>&</sup>lt;sup>1)</sup>including gasoline and ethane from extraction scaffolds; <sup>2)</sup> excluding gasoline and ethane from extraction scaffolds

Table data in .xls format

Total **imports** of energy products increased by 15.7% compared to previous year, mainly because of higher imports of natural gas (+1025 thousand toe) and crude oil (+872 thousand toe).

Imports of petroleum products and coal (including coke) decreased with 106 thousand toe, respectively with 19 thousand toe.

Table 3: Imports of the main energy carriers in 2016, as compared to 2015

	2015	2016	2016 as against 2015	
	thousand toe	thousand toe	thousand toe (±)	%
- coal + coke	1049	1030	-19	98.2
- crude oil	6594	7466	+872	113.2
- usable natural gas	163	1188	+1025	728.8
- petroleum products	2996	2890	-106	96.5

Table data in .xls format

Final energy consumption increased with 421 thousand toe (+1.9%) in 2016 as against 2015.

Final energy consumption in industry (including construction) decreased with 137 thousand toe (-2.1%), mainly due to industrial branches with high consumption of energy resources, such as chemical and pharmaceutical products, rubber and plastics products (-140 thousand toe) and metallurgy (-81 thousand toe), whose cumulated energy consumptions account for 47.1% of final energy consumption in industry (including construction).

The level of final energy consumption in the metallic construction, machinery and equipment industry was about the same with the previous year.

Table 4: Energy use by main activities of national economy and by main industrial activities, in 2016 as compared to 2015

	2015	2016	2016	2016 as against
	thousand	thousand	structure	2015
	toe	toe	%	%
Used energy - total:	37902	37828	100.0	99.8
- gross inland consumption (including losses) 1)	31844	31638	83.6	99.4
- export (including bunkering)	6058	6190	16.4	102.2
Final energy consumption	21896	22317	100.0	101.9
of which:				
- Agriculture and forestry	461	455	2.0	98.7
- Industry (including construction)	6438	6301	28.2	97.9
out of which, in:				
• metallurgy	1776	1695	7.6	95.4
• chemical and pharmaceutical products, rubber and plastics products	1411	1271	5.7	90.1
• metallic construction, machinery				
and equipment industry	<i>579</i>	<i>578</i>	2.6	99.8
• construction	379	353	1.6	93.1
- Transports	5591	6049	27.1	108.2
- Other activities	2019	2074	9.3	102.7
- Population	7387	7438	33.4	100.7

<sup>1)</sup> statistical differences not included;

Table data in .xls format

Energy exports (including bunkering) increased with 132 thousand toe (+2.2%) as compared to 2015.

Gross inland energy consumption per inhabitant in 2016 amounted to 1606 kg oil equivalent.

## Additional information:

For a correct interpretation of indicators, please see the Methodological notes attached to the press release on the homepage.

Additional information can be found in the statistical publication "Energy balance and the structure of energy equipment in 2016", date of issue November 17, 2017.

The next press release is to be issued in November 2018.

Archive of press releases: http://www.insse.ro/cms/en/content/comunicate-de-presa-arhiva

## **Communication Department**

e-mail: biroupresa@insse.ro

Tel: +4021 3181869